

PATENT  
Customer No. 22,852  
Attorney Docket No. 9960.0001-05

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
 )  
Campbell et al. ) Group Art Unit: 1632  
 )  
Application No.: 09/989,128 ) Examiner: D. Crouch  
 )  
Filed: November 21, 2001 ) Confirmation No. 1813  
 )  
For: UNACTIVATED OOCYTES AS CYTOPLAST  
RECIPIENTS FOR NUCLEAR TRANSFER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**TERMINAL DISCLAIMER**

Assignee, Roslin Institute represents that it is the assignee of the entire right, title and interest in and to the instant application, Application No. 09/989,128, filed November 21, 2001, as evidenced by assignments recorded at Reel 8582, Frames 0263-0264 (copy attached); Reel 9220, Frames 0250-0256 (copy attached); and Reel 017336, Frame 0136 (copy attached).

Assignee, Roslin Institute, further represents that it is the assignee of the entire right, title and interest in and to U.S. Patent No. 6,548,741, as evidenced by assignments recorded at Reel 12625, Frames 0241-0246 (copy attached), and by assignments attached hereto.

To obviate a double patenting rejection, assignee hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the

instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. §§ 154 to 156 and 173, as presently shortened by any terminal disclaimer, of prior patent No. 6,548,741. Assignee hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, Assignee does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. §§ 154 to 156 and 173 of the prior patent, as presently shortened by any terminal disclaimer, in the event that the prior patent later expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or in part, is terminally disclaimed under 37 C.F.R. § 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

The undersigned is an attorney of record.

Respectfully submitted,

Dated: March 9, 2007

By: \_\_\_\_\_

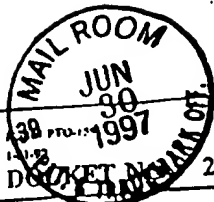
Salvatore J. Arrigo

Reg. No. 46,063

Telephone: 202-408-4160

Facsimile: 202-408-4400

E-mail: [arrigos@finnegan.com](mailto:arrigos@finnegan.com)



07-14-1997



U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

DOCKET NUMBER 2980-003

160454558

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereto:

1. Name of conveying party(ies):  
Keith Henry Stockman CAMPBELL and Ian WILLIOT

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:  
☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: May 13, 1997

2. Name and address of receiving party(ies):

Name: Roslin Institute (Edinburgh)

Internal Address

Street Address: Roslin

City: Midlothian EH25 9J5 State/Country: GREAT BRITAIN  
ZIP:

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If the document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s). 08/803,165, filed February 19, 1997

B. Patent No(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: LOWE PRICE LEBLANC & BECKER

Internal Address:

Street Address: 99 Canal Center Plaza, Suite 300

City: Alexandria State: VA ZIP: 22314

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$40.00

☐ Enclosed

☒ Authorized to be charged to deposit account

8. Deposit account number:

12-2237

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Robert L. Price, 22,685

Name and Registration No. of Person Signing

Signature

June 30, 1997

Date

Total number of pages comprising cover sheet: 1

CMB No. 0851-0011 (exp. 4/94)

07/10/1997 T10N11 00000035 DAN:122237 08003165  
01 FC:581 40.00 CH

PATENT  
REEL: 858? FRAME: 0263

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned.

(1) Keith Henry Stockman Campbell (4) \_\_\_\_\_  
 (2) Ian Wilmut (5) \_\_\_\_\_  
 (3) \_\_\_\_\_ (6) \_\_\_\_\_

who have made a certain new and useful invention, hereby sell, assign and transfer unto

Roslin Institute (Edinburgh), Roslin, Midlothian EH25 9PS, Great Britain

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

(a) for which an application for United States Letters Patent was filed on February 19, 1997, and identified by United States Serial No. 08/803,165; or

(b) for which an application for United States Letters Patent was executed on May 13<sup>th</sup>, 1997

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the dates indicated aside our signatures:

INVENTORS	DATE SIGNED
1) <u>Name: Keith Henry Stockman Campbell</u> <i>KH Campbell</i>	<u>13.05.97.</u>
2) <u>Name: Ian Wilmut</u> <i>I Wilmut</i>	<u>May 13 1997</u>
3) <u>Name:</u>	_____
4) <u>Name:</u>	_____
5) <u>Name:</u>	_____
6) <u>Name:</u>	_____

RECORDED: 06/30/1997

PATENT  
 REEL: 8582 FRAME: 0264

MRD 5-29-98

06-10-1998

FORM PTO-159a  
1-31-92

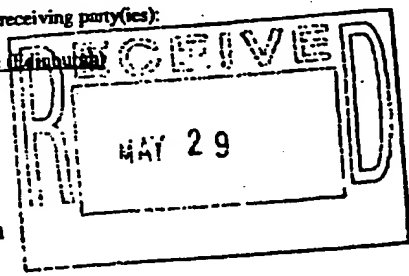
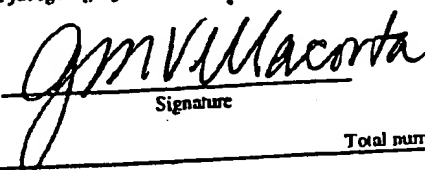
DOCKET NO.: 2980-003



100733314

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Original documents or copy thereto:

<b>1. Name of conveying party(ies):</b> ROSLIN INSTITUTE (EDINBURGH)  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>2. Name and address of receiving party(ies):</b> Name: Roslin Institute (Edinburgh) Internal Address:  Street Address: Roslin  City: Midlothian EH25 9PS State/Country: GREAT BRITAIN ZIP: Additional name(s) & address(es) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>3. Nature of conveyance:</b> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other  Execution Date: March 26, 1998 and April 7, 1998			
<b>4. Application number(s) or patent number(s):</b> If the document is being filed together with a new application, the execution date of the application is: A. Patent / application No(s). 08/803,165, filed February 19, 1997 B. Patent No(s).  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>5. Name and address of party to whom correspondence concerning document should be mailed:</b> Name: Gilberto M. Villacorta PEPPER HAMILTON LLP Internal Address:  Street Address: 1300 Nineteenth St., N.W.  City: Washington, D.C. State: ZIP: 20036		<b>6. Total number of applications and patents involved: 1</b>  <b>7. Total fee (37 CFR 3.41)</b> \$40.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account  <b>8. Deposit account number:</b> 50-0436	
06/08/1998 DROUTEN 00000171 300436 08803163 01 FC:581 40.00 CH		DO NOT USE THIS SPACE	
<b>9. Statement and signature.</b> To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  Gilberto M. Villacorta 34,038 Name and Registration No. of Person Signing   Signature  May 29, 1998 Date  Total number of pages comprising cover sheet: 2			

CMB No. 0851-0011 (exp. 4/94)

Document # 71087

PATENT  
REEL: 9220 FRAME: 0250

**DOCKET NO.: 2980-003**

**Continuation of Recordation Cover Sheet, Item # 2:**

**The Minister of Agriculture, Fisheries and Food  
Nobel House  
17 Smith Square  
London, SW1P 3JR**

**Biotechnology and Biological Sciences Research Council  
Polaris House  
North Star Avenue  
Swindon, SN2 1UH**

**PATENT  
REEL: 9220 FRAME: 0251**

**PATENT ASSIGNATION**

by

**(1) ROSLIN INSTITUTE (EDINBURGH).**

in favour of

**ROSLIN INSTITUTE (EDINBURGH); THE MINISTER OF AGRICULTURE,  
FISHERIES AND FOOD; and BIOTECHNOLOGY and BIOLOGICAL SCIENCES  
RESEARCH COUNCIL**

1998

**Wright Johnston & Mackenzie  
Solicitors  
12 St Vincent Place  
Glasgow G1 2EQ**

**(Ref: A00020016/KMC/JCH)**

**PATENT  
REEL: 9220 FRAME: 0252**

## PATENT ASSIGNATION

by



- (1) **ROSLIN INSTITUTE (EDINBURGH)**, incorporated under the Companies Acts as a company limited by guarantee with registered number 157100 and having its registered office at Roslin, Midlothian, EH25 9PS ("the Assignor")

in favour of

- (2) **ROSLIN INSTITUTE (EDINBURGH)**, incorporated under the Companies Acts as a company limited by guarantee with registered number 157100 and having its registered office at Roslin, Midlothian, EH25 9PS and **THE MINISTER OF AGRICULTURE, FISHERIES AND FOOD** of Nobel House, 17 Smith Square, London, SW1P 3JR acting through the Ministry of Agriculture, Fisheries and Food; and **BIOTECHNOLOGY and BIOLOGICAL SCIENCES RESEARCH COUNCIL**, whose principal office is at Polaris House, North Star Avenue, Swindon, SN2 1UH (collectively referred to as "the Assignees")

### WHEREAS

- (A) The Assignor is the proprietor of the Patent Applications set out in the Schedule annexed and executed as relative hereto (the "Patent Applications");
- (B) The Assignor has agreed to assign the Patent Applications to the Assignees; and
- (C) The Assignees have agreed to hold the Patent Applications and any granted patents issuing from such applications subject to a Co-Ownership Agreement to be entered into of even date herewith by the parties to this Agreement.

NOW IT IS HEREBY AGREED as follows:-

#### 1. Assignment

The Assignor hereby assigns to the Assignees as joint owners the entire right, title and interest of the Assignor in and to the Patent Applications and any patents or other similar forms of protection granted pursuant to the Patent Applications together with the right to recover and to take all such proceedings as may be necessary for the



recovery of damage and other forms or relief in respect of all infringements of the Patent Applications whether taking place before or after the date of this Assignment.

## 2. Further Assurance

Each party agrees generally to sign, seal, execute and deliver all documents, deeds, licences and agreements and to do all acts and things which may be required or may be deemed necessary that any party for giving effect to this Assignment including, without limitation, entry into instruments confirmatory of such rights for registration with appropriate authorities anywhere in the world.

## 3. Governing Law

This Agreement shall be governed by Scots Law and the parties agree to submit to the non exclusive jurisdiction of the Scottish Courts: IN WITNESS WHEREOF these presents consisting of this and the preceding page together with the Schedule annexed hereto are executed as follows:-

Subscribed for and on behalf of BIOTECHNOLOGY AND BIOLOGICAL SCIENCES RESEARCH COUNCIL by Scott McGregor Lawrie their duly authorised signatory at London on 26<sup>th</sup> March 1998 before the following witness:-

Witness: Justine A Strong  
 Full Name: JUSTINE ANN STRONG  
 Address: 12. ST VINCENT PLACE  
GLASGOW  
 Occupation: TRAINEE SOLICITOR

Scott McGregor Lawrie  
 Authorised Signatory

Subscribed for and on behalf of THE MINISTER OF AGRICULTURE, FISHERIES AND FOOD by Dr Anthony Richard Burne, duly authorised signatory at London on 26<sup>th</sup> March 1998 before the following witness:-

Witness: Marglyn Wickes  
 Full Name: MRS. MARYLUN WICKES  
 Address: ST. CHRISTOPHER HOUSE  
SOUTHWARK ST, LONDON  
 Occupation: CIVIL SERVANT.

Dr Anthony Richard Burne  
 Authorised Signatory

PATENT

REEL: 9220 FRAME: 0254

Subscribed for and on behalf of ROSLIN INSTITUTE (EDINBURGH) by Professor  
Grahame John Bulfield, Director and Chief Executive, at Roslin on 7<sup>th</sup> April  
1992 before the following witness:-

Witness: Cian A Noh

Full Name: CAROL ANN NEWMAN

Address: 12 ST VINCENT PLACE

GLASGOW

Occupation: SOLICITOR

This is the Schedule referred to in the Assignment by (1) Roslin Institute (Edinburgh) in favour of (2) Roslin Institute (Edinburgh); The Minister of Agriculture, Fisheries and Food; and Biotechnology and Biological Sciences Research Council

### 1. Unactivated Oocytes and Cytoplasm Recipients for Nuclear Transfer (MAGIC)

Filing Date	Priority Date	Country	Application No
30 <sup>th</sup> August 1996	31 <sup>st</sup> August 1995	International	PCT/GB96/02098
30 <sup>th</sup> August 1996	31 <sup>st</sup> August 1995	South Africa	96/7383
30 <sup>th</sup> August 1996	31 <sup>st</sup> August 1995	USA	08/803,165

International Patent Application - proceeding in:

Czech Republic, Hungary, Norway, Poland, Russian Federation, Ukraine, Canada, Brazil, Mexico, Cuba, Australia, China, Israel, Japan, Republic of Korea, New Zealand, Singapore, Vietnam, United Kingdom, Hong Kong, Europe (Austria, Belgium, Switzerland/Liechtenstein, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Ireland, Italy, Luxembourg, Monaco, Netherlands, Portugal, Sweden).

### 2. Quiescent Cell Populations for Nuclear Transfer (Quiescence)

Filing Date	Priority Date	Country	Application No
30 <sup>th</sup> August 1996	31 <sup>st</sup> August 1995	International	PCT/GB96/02099
30 <sup>th</sup> August 1996	31 <sup>st</sup> August 1995	South Africa	96/7390
30 <sup>th</sup> August 1996	31 <sup>st</sup> August 1995	USA	08/802,282

International Patent Application - proceeding in:

Czech Republic, Hungary, Norway, Poland, Russian Federation, Ukraine, Canada, Brazil, Mexico, Cuba, Australia, China, Israel, Japan, Republic of Korea, New Zealand, Singapore, Vietnam, United Kingdom, Hong Kong, Europe (Austria, Belgium, Switzerland/Liechtenstein, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Ireland, Italy, Luxembourg, Monaco, Netherlands, Portugal, Sweden).

*Scott M. Levine*

*Albino*

*RECORDED: 05/29/1998*

PATENT  
REEL: 9220 FRAME: 0256



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 21, 2006

PTAS

\*700250393A\*

\*700250393A\*

FINNEGAN, HENDERSON, FARABOW, GARRETT &  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENTTHE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF  
THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS  
AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER  
REFERENCED BELOW.PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE  
INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA  
PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD  
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY  
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350.  
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,  
MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 03/14/2006

REEL/FRAME: 017336/0136  
NUMBER OF PAGES: 10BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).  
DOCKET NUMBER: 9960.0002-02ASSIGNOR:  
ROSLIN INSTITUTE (EDINBURGH)

DOC DATE: 06/30/2003

ASSIGNOR:  
SECRETARY OF STATE FOR  
ENVIRONMENT, FOOD & RURAL  
AFFAIRS

DOC DATE: 06/30/2003

ASSIGNOR:  
BIOTECHNOLOGY AND BIOLOGICAL  
SCIENCES RESEARCH COUNCIL  
(BBSRC)

DOC DATE: 05/22/2003

017336/0136 PAGE 2

## ASSIGNEE:

ROS LIN (EDINBURGH)

ROS LIN

MIDLOTHIAN, EH25 9PS, UNITED  
KINGDOM

SERIAL NUMBER: 08802282

PATENT NUMBER: 6147276

TITLE: QUIESCENT CELL POPULATIONS FOR NUCLEAR TRANSFER IN THE PRODUCTION  
OF NON-HUMAN MAMMALS AND NON-HUMAN MAMMALIAN EMBRYOS

FILING DATE: 02/19/1997

ISSUE DATE: 11/14/2000

SERIAL NUMBER: 08803165

PATENT NUMBER: 6252133

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS OF NUCLEI FROM  
QUIESCENT AND NON-QUIESCENT CELLS WHILE MAINTAINING CORRECT PLOIDY

FILING DATE: 02/19/1997

ISSUE DATE: 06/26/2001

SERIAL NUMBER: 09225233

PATENT NUMBER:

TITLE: QUIESCENT CELL POPULATIONS FOR NUCLEAR TRANSFER

FILING DATE: 01/04/1999

ISSUE DATE:

SERIAL NUMBER: 09658862

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 09/08/2000

ISSUE DATE:

SERIAL NUMBER: 09650194

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 08/29/2000

ISSUE DATE:

SERIAL NUMBER: 09650285

PATENT NUMBER: 6525243

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS OF QUIESCENT CELL  
NUCLEI WHILE MAINTAINING CORRECT PLOIDY

FILING DATE: 08/29/2000

ISSUE DATE: 02/25/2003

SERIAL NUMBER: 09973701

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 10/11/2001

ISSUE DATE:

SERIAL NUMBER: 09989125

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 11/21/2001

ISSUE DATE:

SERIAL NUMBER: 09989128

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 11/21/2001

ISSUE DATE:

SERIAL NUMBER: 09989126

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 11/21/2001

ISSUE DATE:

SERIAL NUMBER: 10118337

FILING DATE: 04/09/2002

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

017336/0136 PAGE 3

SERIAL NUMBER: 10151304

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 05/21/2002

ISSUE DATE:

SERIAL NUMBER: 10151305

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 05/21/2002

ISSUE DATE:

SERIAL NUMBER: 10190611

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 07/09/2002

ISSUE DATE:

SERIAL NUMBER: 10190617

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 07/09/2002

ISSUE DATE:

SERIAL NUMBER: 10234854

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 09/05/2002

ISSUE DATE:

SERIAL NUMBER: 10914161

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 08/10/2004

ISSUE DATE:

SERIAL NUMBER: 10915338

PATENT NUMBER:

TITLE: QUIESCENT CELL POPULATIONS FOR NUCLEAR TRANSFER

FILING DATE: 08/11/2004

ISSUE DATE:

SERIAL NUMBER: 10909845

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 08/03/2004

ISSUE DATE:

SERIAL NUMBER: 11068903

PATENT NUMBER:

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS FOR NUCLEAR TRANSFER

FILING DATE: 03/02/2005

ISSUE DATE:

SERIAL NUMBER: 08802282

PATENT NUMBER: 6147276

TITLE: QUIESCENT CELL POPULATIONS FOR NUCLEAR TRANSFER IN THE PRODUCTION OF NON-HUMAN MAMMALS AND NON-HUMAN MAMMALIAN EMBRYOS

FILING DATE: 02/19/1997

ISSUE DATE: 11/14/2000

SERIAL NUMBER: 08803165

PATENT NUMBER: 6252133

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS OF NUCLEI FROM QUIESCENT AND NON-QUIESCENT CELLS WHILE MAINTAINING CORRECT FLOIDY

FILING DATE: 02/19/1997

ISSUE DATE: 06/26/2001

SERIAL NUMBER: 09650285

FILING DATE: 08/29/2000

TITLE: UNACTIVATED OOCYTES AS CYTOPLAST RECIPIENTS OF QUIESCENT CELL  
NUCLEI WHILE MAINTAINING CORRECT PLOIDY

017336/0136 PAGE 4

SHAREILL COLES, EXAMINER  
ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION

U.S. 141/2000  
 REPRODUCTION COVER SHEET  
 PATENTS ONLY

U.S. Department of Commerce  
 Patent and Trademark Office  
 Attorney Docket No. 0960,0002-02  
 Attorney Customer Number: 22,852

To the Director of the U.S. Patent and Trademark Office:  
 Please record the attached original documents or copy thereof.

Mail Stop Assignment Recordation Services

1. Name of conveying party(ies):  
 (1) Roslin Institute (Edinburgh) (Dated: June 30, 2003)

2. Name and address of receiving party(ies):

Name: Roslin (Edinburgh)

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No  
 See Attachment A

Internal Address: Roslin

3. Nature of conveyance:

Street Address:

☒ Assignment

☐ Merger

City: Midlothian, EH26 9PS

☐ Security Agreement

☐ Change of Name

State: The United Kingdom Zip Code: [Text]

☐ Joint Research Agreement

☐ Government Interest Assignment

Additional name(s) & Address(es) attached?

☐ Executive Order 9494, Confirmatory License

☐ Other:

☐ Yes ☒ No

Execution Date: [Date(s)]: (1) June 30, 2003  
 (2) June 10, 2003  
 (3) May 22, 2003

4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application: [Type appropriate information]

A. Patent Application Number(s):

08/802,282  
 08/803,185

B. Patent Number(s):

6,147,276  
 6,252,139  
 6,625,243

Additional numbers attached? ☒ Yes See Attachment B ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: 22

Name:

7. Total fee (37 CFR 1.21(h) and 3.41): \$40

Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP.

☐ Enclosed (Please charge deficiency or credit overpayment to deposit account 06-0916)

Street Address: 901 New York Avenue, N.W.

☒ Authorized to be charged to deposit account

City: Washington, D.C.

State: Zip: 20001-4413

8. Deposit Account No.: 06-0916

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Signed: 

Salvatore J. Arrigo Reg. No. 46,063

3/14/06  
 Date

Total number of pages including cover sheet, attachments and documents: 10



**1. (continued) Attachment A: Additional Conveying Parties**

- (2) Secretary of State for Environment, Food & Rural Affairs (Dated: June 10, 2003)**  
**("The Secretary of State") acting through the**  
**Department for the Environment, Food & Rural Affairs ("DEFRA")**  
**formerly known as the Ministry for Agriculture Fisheries and Food ("MAFF")**
- (3) Biotechnology and Biological Sciences Research Council ("BBSRC")**  
**(Dated: May 22, 2003)**

**4. (continued) Attachment B Patent Application Nos.****A. U.S. Patent Application/Serial No.**

09/225,233  
09/658,862  
09/650,194  
09/650,285  
09/973,701  
09/989,125  
09/989,128  
09/989,126  
10/118,337  
10/151,304  
10/151,305  
10/190,611  
10/190,617  
10/234,854  
10/914,161  
10/915,338  
10/909,845  
11/068,903

C-CLK  
C-DEEP**ASSIGNATION****BY**

**ROSLIN INSTITUTE (EDINBURGH)** incorporated under the Companies Acts as a company limited by guarantee with registered number 157100 and having its registered office at Roslin, Midlothian, EH25 9PS ("Roslin");

**THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD & RURAL AFFAIRS** of Nobel House, 17 Smith Square, London, SW1P 3JR ("the Secretary of State") acting through the Department for the Environment, Food & Rural Affairs ("DEFRA") formerly known as the Ministry for Agriculture Fisheries and Food ("MAFF"); and

**BIOTECHNOLOGY AND BIOLOGICAL SCIENCES RESEARCH COUNCIL** whose principal office is at Polaris House, North Star Avenue, Swindon, SN2 1UH ("BBSRC");

**In favour of**

**ROSLIN INSTITUTE (EDINBURGH)** incorporated under the Companies Acts as a company limited by guarantee with registered number 157100 and having its registered office at Roslin, Midlothian, EH25 9PS ("Roslin").

**WHEREAS:**

- (A) Roslin, the Secretary of State and BBSRC are legal and beneficial owners of the patents and patent applications set out in the Schedule annexed and identified as relative hereto ("the Patents").
- (B) Roslin, the Secretary of State and BBSRC have agreed to assign any rights and interest they may have in the Patents to Roslin on the terms set out in this Assignment.

**IT IS AGREED as follows:****1. ASSIGNATION**

In consideration of the sum of £1 to be paid by each of Roslin, the Secretary of State and BBSRC to each of Roslin, the Secretary of State and BBSRC (the receipt and sufficiency of which is hereby acknowledged) Roslin, the Secretary of State and BBSRC hereby assign to Roslin:

- 1.1 all of its right, title and interest in and to the Patents; and

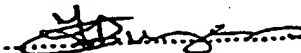
- 1.2 all rights and powers arising or accrued therefrom (whether under statute or common law) including the right to sue for damages and other remedies in respect to any prior infringement of the assigned rights in or in respect of the Patents and to retain any and all sums obtained through such actions and the right to apply for, prosecute and obtain patent or similar protection throughout the world in respect of the inventions therein including any rights to claim priority therefrom so that the grant of any such patent or similar protection shall be in the name of and vest in Roslin.

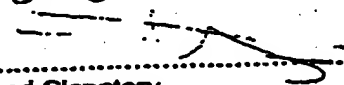
2.

**LAW AND JURISDICTION**

This Assignment shall be governed by and construed in accordance with Scots law and the parties agree to submit to the non-exclusive jurisdiction of the Scottish courts: IN WITNESS WHEREOF these presents consisting of this and the preceding page together with the Schedule are executed as follows:

Subscribed for and on behalf of ROSLIN INSTITUTE (EDINBURGH) by J-W WITNESS  
duly authorised signatory, at Roslin on 20 June 2003 before the  
following witness:

  
Witness

  
Authorised Signatory

FRANCES BURGESS  
Full Name

% ROSLIN INSTITUTE  
Address

ROSLIN  
P.A.  
Occupation

Subscribed for and on behalf of BIOTECHNOLOGY AND BIOLOGICAL SCIENCES  
RESEARCH COUNCIL by DR D MCDOWALL, duly authorised signatory  
at SWINDON on 22 MAY 2003 before the following witness:

  
Witness

  
Authorised Signatory

MARY MCDOWALL  
Full Name

BSCAL POLARIS HOUSE  
Address

15001 STAR AVE, SLANDERS

ADMIN MANAGER INNOVATION UNIT  
Occupation

Subscribed for and on behalf of THE SECRETARY OF STATE FOR THE ENVIRONMENT,  
FOOD & RURAL AFFAIRS by D: A. R. BURNE, duty authorised  
signatory at LONDON on 10 June 2003 2003 before the  
following witness:

G. Bacon  
Witness

  
Authorised Signatory

EDWARD GUYAN BACON  
Full Name

CROMWELL HOUSE, LONGDON SW1P 3TH  
Address

HEAD OF BRANCH B

RESEARCH POLICY & INTERNATIONAL DIVISION, DEFRA  
Occupation

Subscribed for and on behalf of ROSLIN INSTITUTE (EDINBURGH) by  
at on 2003 before the following witness:-

.....  
Witness

.....  
Full Name

.....  
Address

.....  
Occupation

This is the Schedule referred to in the foregoing Assignment by (1) Roslin Institute (Edinburgh); (2) Department for the Environment, Food & Rural Affairs; and (3) Biotechnology and Biological Sciences Research Council in favour of Roslin Institute (Edinburgh).

## THE PATENTS

### 1. Quiescent Cell Populations for Nuclear Transfer (Quiescent Cells)

Priority Date: 31 August 1995

Priority Application no.: GB 9517780.4 filed in the name of ROSLIN INSTITUTE (EDINBURGH)

International Application no.: PCT/GB96/02099 filed in the name of ROSLIN INSTITUTE (EDINBURGH)

International Filing Date: 30 August 1996

\* - Indicates divisional application filed  
† - European patent application designates: AT, BE, CH/LI, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI

Country	Geron ref.	K&S ref.	Application no.	Publication / Grant no.	Status
USA	700/201	P18787US	08/802,282	6,147,276	Granted
USA*	700/202	J18787US	09/225,233	-	Pending
United Kingdom	700/201UK	V18787GB	9802915.0	2318578	Granted
United Kingdom*	700/202UK D	J18787GB	9824304.1	2331751	Granted
EPO	700/201EP	P18787EP	96928587.3	0849990	Granted
Austria	700/201EP	P18787EP	96928587.3	-	Granted
Belgium	700/201EP	P18787EP	96928587.3	-	Granted
Switz./Liechtenstein	700/201EP	P18787EP	96928587.3	-	Granted
Germany	700/201EP	P18787EP	96928587.3	-	Granted
Denmark	700/201EP	P18787EP	96928587.3	-	Granted
Spain	700/201EP	P18787EP	96928587.3	-	Granted
France	700/201EP	P18787EP	96928587.3	-	Granted
Ireland	700/201EP	P18787EP	96928587.3	-	Granted
Italy	700/201EP	P18787EP	96928587.3	-	Granted
Luxembourg	700/201EP	P18787EP	96928587.3	-	Granted
Monaco	700/201EP	P18787EP	96928587.3	-	Granted
Netherlands	700/201EP	P18787EP	96928587.3	-	Granted
Sweden	700/201EP	P18787EP	96928587.3	-	Granted
Slovenia	700/201EP	P18787EP	96928587.3	-	Granted

Country	Geron ref.	K&S ref.	Application no.	Publication / Grant no.	Status
EPO*	700/202EP D	J18787EP	98203752.5	0930009	Pending
EPO*	700/203EP D	K18787EP	99204105.3	1005789	Pending
South Africa	700/201SA	P18787ZA	96/7390	96/7390	Granted
Czech Republic	700/201CZ	P18787CZ	PV608-98	-	Abandoned
Hungary	700/201HU	P18787HU	P9900234	-	Abandoned
Norway	700/201NO	P18787NO	980845	-	Abandoned
Poland	700/201PL	P18787PL	P325331	-	Abandoned
Russian Federation	700/201/RU	P18787RU	98105782	-	Abandoned
Ukraine	700/201/UA	P18787UA	98031551	-	Abandoned
Canada	700/201CA	P18787CA	2228588	-	Pending
Brazil	700/201BR	P18787BR	9610034-6	-	Pending
Mexico	700/201MX	P18787MX	981646	-	Pending
Cuba	700/201CU	P18787CU	28/98	-	Abandoned
Australia	700/201AU	P18787AU	68310/96	716956	Granted
Australia	700/202AU D	J18787AU	35418/00	-	Pending
China	700/201CN	P18787CN	96197891.0	-	Pending
Israel	700/201IL	P18787IL	123298	-	Abandoned
Japan	700/201JP	P18787JP	509996/96	-	Pending
South Korea	700/201KR	P18787KR	701381/98	-	Pending
New Zealand	700/201NZ	P18787NZ	316149	316149	Granted
New Zealand*	700/202NZ D	J18787NZ	334288	334288	Granted
New Zealand*	700/203NZ D	K18787NZ	337311	-	Pending
Singapore	700/201SG	P18787SG	9801334-5	50267	Granted
Singapore*	700/202SG D	J18787SG	9800937-5	75155	Granted
Vietnam	700/201VN	P18787VN	19980153	2746	Abandoned
Hong Kong	700/201HK	P18787HK	98104138.8	1004838	Granted
Hong Kong*	700/202HK D	J18787HK	99104594.4	1018394	Granted

## 2. Unactivated Oocytes and Cytoplasm Recipients for Nuclear Transfer (Magic)

Priority Date: 31 August 1995

Priority Application no.: GB 9517779.6 filed in the name of ROSLIN INSTITUTE (EDINBURGH)

International Application no.: PCT/GB96/02098 filed in the name of ROSLIN INSTITUTE (EDINBURGH)

International Filing Date: 30 August 1996

\* - Indicates divisional/continuation application filed

† - European patent application designates: AT, BE, CH/LI, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI

- (1) - USSN 09/658,862 divisional from USSN 08/803,165
- (2) - USSN 09/650,194 continuation of USSN 08/803,165
- (3) - USSN 09/650,285 continuation of USSN 08/803,165
- (4) - USSN 09/973,701 continuation of USSN 09/650,285
- (5) - USSN 09/989,125 continuation of USSN 09/650,285
- (6) - USSN 09/989,128 continuation of USSN 09/650,285
- (7) - USSN 09/989,126 continuation of USSN 09/650,285
- (8) - USSN 10/118,337 continuation of USSN 09/989,125
- (9) - USSN 10/151,304 continuation of USSN 09/989,128
- (10) - USSN 10/151,305 continuation of USSN 09/989,126
- (11) - USSN 10/190,611 continuation of USSN 09/650,285
- (12) - USSN 10/190,617 continuation of USSN 09/650,285
- (13) - USSN 10/234,854 continuation of USSN 10/151,305

Country	Geron ref.	K&S ref.	Application no.	Publication / Grant no.	Status
USA	710/201	P18826US	08/803,165	6,252,133	Granted
USA <sup>(1)</sup>	710/202 D	J18826US	09/658,862	-	Pending
USA <sup>(2)</sup>	710/204 C	V18826US	09/650,194	-	Pending
USA <sup>(3)</sup>	710/203 C	W18826US	09/650,285	-	Pending
USA <sup>(4)</sup>	710/210 C	W18826US-1	09/973,701	-	Pending
USA <sup>(5)</sup>	710/205 C	W18826US-2	09/989,125	-	Pending
USA <sup>(6)</sup>	710/206 C	W18826US-3	09/989,128	-	Pending
USA <sup>(7)</sup>	710/207 C	W18826US-4	09/989,126	-	Pending
USA <sup>(8)</sup>	710/211 C	W18826US-5	10/118,337	-	Abandoned
USA <sup>(9)</sup>	710/212 C	W18826US-6	10/151,304	-	Abandoned
USA <sup>(10)</sup>	710/213 C	W18826US-7	10/151,305	-	Abandoned
USA <sup>(11)</sup>	710/209 C	W18826US-8	10/190,611	-	Abandoned
USA <sup>(12)</sup>	710/214 C	W18826US-9	10/190,617	-	Pending
USA <sup>(13)</sup>	-	W18826US-10	10/234,854	-	Pending
United Kingdom	710/201UK	V18826GB	9802916.8	2318792	Granted
United Kingdom*	710/202UK D	J18826GB	9926730.4	2340493	Granted
EPO <sup>†</sup>	710/201EP	P18826EP	96928586.5	0847237	Pending
South Africa	710/201SA	P18826ZA	96/7383	96/7383	Granted
Czech Republic	710/201CZ	P18826CZ	PV604-98	-	Abandoned
Hungary	710/201HU	P18826HU	P9802485	-	Abandoned
Norway	710/201NO	P18826NO	98064E	-	Abandoned



Country	Geron ref.	K&S ref.	Application no.	Publication / Grant no.	Status
Poland	710/201PL	P18826PL	P325336	-	Abandoned
Russian Federation	710/201RU	P18826RU	98105617	-	Abandoned
Ukraine	710/201UA	P18826UA	98031552	-	Abandoned
Canada	710/201CA	P18826CA	2228657	2229657	Pending
Brazil	710/201BR	P18826BR	9610013-3	-	Pending
Mexico	710/201MX	P18826MX	981645	-	Pending
Mexico*	710/202MX D	J18826MX-1	PA/a/2001/010 145	-	Pending
Cuba	710/201CU	P18826CU	29/98	-	Abandoned
Australia	710/201AU	P18826AU	68309/96	728809	Granted
Australia*	710/202AU D	J18826AU	28013/01	-	Pending
Australia*	710/203AU D	K18826AU	28014/01	-	Pending
China	710/201CN	P18826CN	96197892.9	-	Pending
Israel	710/201IL	P18826IL	123417	-	Abandoned
Japan	710/201JP	P18826JP	509995/96	-	Pending
South Korea	710/201KR	P18826KR	98-701382	-	Pending
New Zealand	710/201NZ	P18826NZ	316148	316148	Granted
New Zealand*	710/202NZ D	J18826NZ	335407	335407	Granted
New Zealand*	710/203NZ D	K18826NZ	504101	-	Pending
Singapore	710/201SG	P18826SG	9801330-3	-	Pending
Singapore*	710/201SG D	J18826SG	9900941-7	75919	Granted
Vietnam	710/201VN	P18826VN	S19980152	2747	Abandoned
Hong Kong	710/201HK	P18826HK	98104135.1	1004937	Granted
Hong Kong*	710/202HK D	J18826HK	00103527.6	1024381	Granted

Signed on behalf of Roslin .....

Signed on behalf of DEFRA .....

Signed on behalf of BBSRC .....

## ASSIGNATION

This is an assignment by Biotechnology and Biological Sciences Research Council, whose principal office is at Polaris House, North Star Avenue, Swindon SN2 1UH, England ("BBSRC"); the Roslin Institute (Edinburgh) of Roslin Biotechnology Centre, Roslin, Midlothian EH25 9PS, Scotland ("the Institute"); Geron Bio-Med Limited; a company incorporated in Scotland (Registered No. 179263) and having its Registered Office at Roslin Biotechnology Centre, Roslin, Midlothian EH25 9PS, Scotland ("Bio-Med"); and Ian Wilmut and Jie Zhu along with Paul De Sousa and Timothy James King of Midlothian, Scotland ("the Inventors"), in favor of Geron Corporation, a Delaware corporation having a principal place of business at 230 Constitution Drive, Menlo Park, California 94025, USA ("Geron"). Collectively, the BBSRC, the Roslin Institute, Bio-Med and the Inventors are hereby referred to as the ASSIGNORS.

## WHEREAS:

- (A) The Inventors have created certain new and useful improvements directed towards optimising the developmental competence of oocytes, such invention being described in the following patent application:

<i>Patent Application No.</i>	<i>Title</i>	<i>Filing Date</i>
International Patent Application No. PCT/GB99/03384	Porcine Oocytes with Improved Developmental Competence	12 October 1999

- (B) Said invention was created by the Inventors in their capacity as employees of the BBSRC based at the Roslin Institute and in circumstances such that the Inventors' rights to the Inventions belong ab initio to the BBSRC by virtue of the provisions of the UK Patents Act 1977.
- (C) The invention was created in the course of (i) a research project funded by Geron Bio-Med Limited pursuant to a Research Agreement entered into between the Institute and Geron Bio-Med Limited dated 7<sup>th</sup> April 1998 and (ii) a research project funded by Geron pursuant to a Research and License Agreement entered into between the Institute, Geron and Geron Bio-Med Limited dated 30<sup>th</sup> April and 3<sup>rd</sup> May 1999 ("the Research Agreements"). Pursuant to the Research Agreements, and as agreed between Geron and Geron Bio-Med, all rights in and to the invention and the patent application belong to Geron.
- (D) Whereas, the rights in this invention held by Paul De Sousa and Timothy James King have previously been conveyed.

COPY

NOW THEREFORE IT IS AGREED AS FOLLOWS:

1. DEFINITIONS

In this Assignment (including the Recitals) unless the context otherwise requires:

**Invention** means the invention relating to optimising the developmental competence of oocytes which is the subject of the Patent Application;

**Intellectual Property Rights** means all present and future and other relevant intellectual property rights relating to the Invention, and all applications and rights to apply for registration of such rights anywhere in the world and the right to sue for any and all past infringements of such rights;

**Patent Application** means the International Patent Application No. PCT/GB99/03384.

2. ASSIGNATION

The BBSRC, the Roslin Institute, Bio-Med and the Inventors by their execution of this Assignment, hereby assign to Geron Corporation (the Assignee), all property, right, title, and interest in and to the Invention, the Patent Application and the Intellectual Property Rights, including all statutory and common law rights.

3. UNDERTAKING

Each of the Assignors hereby irrevocably undertake at the request and cost of the Assignee to do and execute all such further documents, forms and authorisations as may be required to vest its full property, right, title and interest in and to the Invention, the Patent Application and any other Intellectual Property Rights in the Assignee absolutely, including but not limited to registration of the Assignee's title as proprietor at relevant patent offices and trade mark registries anywhere in the world and, for this purpose, each of the Assignors hereby irrevocably appoints the Assignee to act as their attorney with the power to do and execute any such documents, forms and authorizations on their behalf.

4. GOVERNING LAW

This Assignment shall be governed by and construed in accordance with the laws of Scotland and the parties hereby prorogate the exclusive jurisdiction of the Scottish Courts: **IN WITNESS WHEREOF** these presents on this and the preceding page are executed as follows:

COPY

SUBSCRIBED for and on behalf of  
BIOTECHNOLOGY AND BIOLOGICAL  
SCIENCES RESEARCH COUNCIL by

, Authorised Signatory,

at Sumner

on 14 May

2001 before the

following Witness:

[Signature]  
For and on behalf of Biotechnology and Biological  
Sciences Research Council

1/15 ..... Witness  
KAREN JANE LEWIS ..... Full Name  
4 QUEEN STREET ..... Address  
READING .....

SUBSCRIBED for and on behalf of ROSLIN  
INSTITUTE (EDINBURGH) by

, Authorised Signatory,

at Roslin

on 15 May

2001 before the

following Witness:

[Signature]  
For and on behalf of Roslin Institute (Edinburgh)

[Signature] ..... Witness  
FRANCES BURGESS ..... Full Name  
8 SKELTIE MUR AVE ..... Address  
BONNYVAUGH .....

SIGNED by Ian Wilmut at Roslin

on 15 May

2001 before the

following Witness:

Mary H. Ombugh ..... Witness  
MARY OMBUGH ..... Full Name  
30 CARLOPS CRES ..... Address  
PENICUIK .....

[Signature]  
Ian Wilmut

COPY

SIGNED by Jie Zhu at

on ROSLIN ISRAEL  
following Witness:

2001 before the

..... LYNNE ELWIN ..... Witness  
 ..... LYNNE ELWIN ..... Full Name  
 ..... 3 THE MURRAYS ..... Address  
 ..... EDINBURGH .....

..... Jie Zhu .....  
 Jie Zhu

SUBSCRIBED for and on behalf of GERON BIO-MED LIMITED by BEAD HOY

, Authorised Signatory,

at ROSLIN  
 on 17<sup>th</sup> MAY  
 following Witness:

2001 before the

For and on behalf of Geron Bio-Med Limited

..... Jacqueline Young ..... Witness  
 ..... JACQUELINE C. YOUNG ..... Full Name  
 ..... S. COLLE PARK ..... Address  
 ..... DALKEITH ..... EH22 3JG

SUBSCRIBED for and on behalf of GERON CORPORATION by DAVID J. EARP

, Authorised Signatory,

at Menlo Park, California  
 on October 10  
 following Witness:

2001 before the

For and on behalf of Geron Corporation

..... David J. Earp ..... Witness  
 ..... DAVID J. EARP ..... Full Name  
 ..... 330 Constitution St. ..... Address  
 ..... Menlo Park, Ca. 94025

**COPY****ASSIGNATION**

This is an assignment by Biotechnology and Biological Sciences Research Council, whose principal office is at Polaris House, North Star Avenue, Swindon SN2 1UH, England ("BBSRC"); the Roslin Institute (Edinburgh) of Roslin Biotechnology Centre, Roslin, Midlothian EH25 9PS, Scotland ("the Institute"); Geron Bio-Med Limited, a company incorporated in Scotland (Registered No. 179263) and having its Registered Office at Roslin Biotechnology Centre, Roslin, Midlothian EH25 9PS, Scotland ("Bio-Med"); and Paul Alexandre De Sousa and Timothy James King of Midlothian, Scotland ("the Inventors"), in favor of Geron Corporation, a Delaware corporation having a principal place of business at 230 Constitution Drive, Menlo Park, California 94025, USA ("Geron"). Collectively, the BBSRC, the Roslin Institute, Bio-Med and the Inventors are hereby referred to as the ASSIGNORS.

**WHEREAS:**

- (A) The Inventors have created certain new and useful improvements directed towards optimising the developmental competence of oocytes, such inventions being described in the following patent applications:

<i>Patent Application No.</i>	<i>Title</i>	<i>Filing Date</i>
UK Patent Application No. 98 22235.9	Biological Manipulation	12 October 1998
U.S. Patent Application No. 60/104,116	Optimising Developmental Competence of Oocytes	13 October 1998
International Patent Application No. PCT/GB99/03384	Porcine Oocytes with Improved Developmental Competence	12 October 1999

- (B) Said inventions were created by the Inventors in their capacity as employees of the BBSRC based at the Roslin Institute and in circumstances such that the Inventors' rights to the Inventions belong ab initio to the BBSRC by virtue of the provisions of the UK Patents Act 1977.
- (C) The inventions were created in the course of (i) a research project funded by Geron Bio-Med Limited pursuant to a Research Agreement entered into between the Institute and Geron Bio-Med Limited dated 7<sup>th</sup> April 1998 and (ii) a research project funded by Geron pursuant to a Research and License Agreement entered into between the Institute, Geron and Geron Bio-Med Limited dated 30<sup>th</sup> April and 3<sup>rd</sup> May 1999 ("the Research Agreements"). Pursuant to the Research Agreements, and as agreed between Geron and Geron Bio-Med, all rights in and to the inventions and the patent applications belong to Geron.

**NOW THEREFORE IT IS AGREED AS FOLLOWS:****1. DEFINITIONS**

In this Assignment (including the Recitals) unless the context otherwise requires:

**Invention** means the invention relating to optimising the developmental competence of oocytes which is the subject of the Patent Applications;

**Intellectual Property Rights** means all present and future and other relevant intellectual property rights relating to the Invention, and all applications and rights to apply for registration of such rights anywhere in the world and the right to sue for any and all past infringements of such rights;

Patent Applications means the United Kingdom Patent Application No. 98 22235.9, United States Provisional Patent Application Serial No. 60/104,116 and International Patent Application No. PCT/GB99/03384.

## 2. ASSIGNATION

The BBSRC, the Roslin Institute, Bio-Med and the Inventors by their execution of this Assignment, hereby assign to Geron Corporation (the Assignee), all property, right, title, and interest in and to the Invention, the Patent Applications and the Intellectual Property Rights, including all statutory and common law rights.

## 3. UNDERTAKING

Each of the Assignors hereby irrevocably undertake at the request and cost of the Assignee to do and execute all such further documents, forms and authorisations as may be required to vest its full property, right, title and interest in and to the Inventions, the Patent Applications and any other Intellectual Property Rights in the Assignee absolutely, including but not limited to registration of the Assignee's title as proprietor at relevant patent offices and trade mark registries anywhere in the world and, for this purpose, each of the Assignors hereby irrevocably appoints the Assignee to act as their attorney with the power to do and execute any such documents, forms and authorizations on their behalf.

## 4. GOVERNING LAW

This Assignment shall be governed by and construed in accordance with the laws of Scotland and the parties hereby prorogate the exclusive jurisdiction of the Scottish Courts: **IN WITNESS WHEREOF** these presents on this and the preceding page are executed as follows:

SUBSCRIBED for and on behalf of  
BIOTECHNOLOGY AND BIOLOGICAL  
SCIENCES RESEARCH COUNCIL by SCOTT  
M. LAURIE, Authorised Signatory, at SWINDON  
on 10/11/2000 before the following Witness:

Mary Moore..... Witness  
MARY MOORE..... Full Name  
8, ANDE CONALES..... Address  
WOLCHTON, SWINDON

Scott Laurie  
For and on behalf of Biotechnology and Biological  
Sciences Research Council

SUBSCRIBED for and on behalf of ROSLIN  
INSTITUTE (EDINBURGH) by

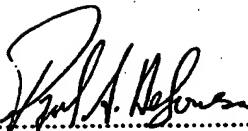
John Witham, Authorised Signatory, at  
on 13/11/2000 before the following Witness:

Frances Burgess..... Witness  
FRANCES BURGESS..... Full Name  
8, SKELTAMUIR AVE..... Address  
BONNYRIGG  
EH19 3PX

John Witham  
For and on behalf of Roslin Institute (Edinburgh)

SIGNED by Paul Alexandre De Sousa at Menlo  
on 31 Oct 2000 before the following Witness:

Mary S. Richards..... Witness  
19 Highland Drive..... Full Name  
Menlo Park..... Address  
Millbrae, CA 94025

  
.....  
Paul Alexandre De Sousa

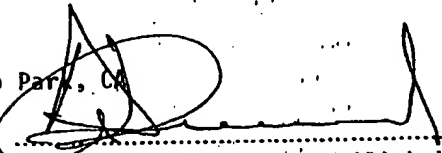
SIGNED by Timothy James King at Menlo  
on 3 Oct 2000 before the following Witness:

William S. Murphy..... Witness  
ROSLYN EAST..... Full Name  
ROSLYN..... Address  
MIDLOTHIAN EH25 9PS

  
.....  
Timothy James King

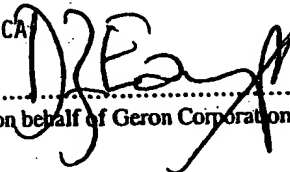
SUBSCRIBED for and on behalf of GERON BIO-  
MED LIMITED by David L. Greenwood  
, Authorised Signatory, at Menlo Park, CA  
on 15 Dec 2000 before the following Witness:

Karen Hakauskas..... Witness  
Karen Hakauskas..... Full Name  
230 Constitution Drive..... Address  
Menlo Park, CA 94025

  
.....  
For and on behalf of Geron Bio-Med Limited

SUBSCRIBED for and on behalf of GERON  
CORPORATION by David J. Earp  
, Authorised Signatory, at Menlo Park, CA  
on 15 Dec 2000 before the following Witness:

Karen Hakauskas..... Witness  
Karen Hakauskas..... Full Name  
230 Constitution Drive..... Address  
Menlo Park, CA 94025

  
.....  
For and on behalf of Geron Corporation



## **ASSIGNMENT OF INTEREST**

This Assignment of Interest is entered by and between ROSLIN INSTITUTE (BDINBURGH), a company incorporated in Scotland under the Companies Acts with registered number 157100 and a registered office at Roslin, Edinburgh, Midlothian, EH25 9PS, Scotland (the "Institute"); and GERON CORPORATION, a Delaware corporation having its principal place of business at 230 Constitution Drive, Menlo Park, California 94025 ("Geron");

WHEREAS, Geron owns all right, title, and interest in and to issued U.S. Patent 6,548,741, entitled "Developmental Competence for Assisted Reproduction and Nuclear Transfer in Pigs" (the "Patent"); and

WHEREAS, Geron wishes to assign all of its right, title and interest in and to the Patent to the Institute, so as to align ownership with the intellectual property licensed to Geron from the Institute by virtue of the Licence Agreement by and between the parties dated as of April 30, 1999, as amended by an agreement dated as of September 30, 2003, and further amended by an agreement dated as of April 5, 2005, respectively.

NOW, THEREFORE, the parties agree as follows:

For good and valuable consideration, the receipt of which is hereby acknowledged, Geron hereby assigns to the Institute all of its right, title and interest in and to the Patent.

The Institute hereby agrees that it will not transfer or reassign its ownership of the Patent which is the subject of this Assignment except in compliance with any Terminal Disclaimer(s) effected through the U.S. Patent & Trademark Office that bind ownership of the Patent to that of any other patent or application.

In testimony whereof, Geron and the Institute have caused this Assignment to be signed by their duly authorised officers, making this Assignment effective as of the last dated signature below.

GERON CORPORATION



Authorised Signature

MARCH 6, 2007

Date

DAVID J. EARP

Name

CHIEF PATENT COUNSEL  
SENIOR VICE PRESIDENT

Title

MENLO PARK, CA.

Place

Before this witness



Witness

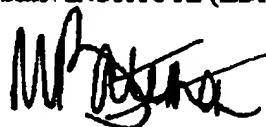
Pamela Smith

Full name

Menlo Park, CA

Address

ROSLIN INSTITUTE (EDINBURGH)



Authorised Signature

6<sup>th</sup> March 2007

Date

MALCOLM BAYEMAN

Name

DIRECTOR OF FINANCE

Title

ROSLIN

Place

Before this witness



Witness

Anne Campbell

Full Name

Roslin Institute, Roslin

Address

Midlothian, EH25 9PS

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